

BONTRAGER RACE XXX LITE HANDLEBAR OWNER'S MANUAL



Figure 1 Bontrager Race XXX Lite handlebar

Table of contents

Read this manual before you ride	.2
Inspect your handlebar regularly	.2
Only use correctly installed bar-ends	.2
Adjust your handlebar for comfort	.3
Bontrager warranty	.3
Handlebar installation instructions	

READ THIS MANUAL BEFORE YOU RIDE

Please read this instruction manual thoroughly before using your new Race XXX Lite handlebar; it contains important safety and maintenance information.

If you do not understand the information in this manual, or you have a question about your Race XXX Lite handlebar that this manual does not cover, consult your Bontrager dealer. If you have a question or problem that your Bontrager dealer can't handle, contact us at:

Bontrager Wheelworks and Components Attn: Customer Service

(920) 478-4670

Attn: Customer Service http://www.bontrager.com 801 W. Madison Street

Waterloo, Wisconsin 53594

Bontrager Race XXX Lite crash replacement policy

Assessing any damage done to a carbon fiber part requires more experience than is needed to inspect metal parts. If you crash your bike and the main force of the impact is absorbed by the handlebar, particularly if bar-ends are installed, we strongly encourage you to replace the bar, even if there are no visual indications of damage.

If this crash occurs within one year from the date of retail purchase, Bontrager offers a crash replacement program, substantially reducing replacement cost. To take advantage of this program, contact using the information listed above, and ask for the Warranty department.

> © Copyright Trek Bicycle Corporation 2004 All rights reserved

The handlebar, the part you hold with your hands when riding a bicycle, is primarily responsible for your ability to steer and control the bike. In addition, the handlebar works with the seat to define your posture on the bike, adding comfort and efficiency to your cycling. The handlebar is connected to the bike by the stem. This section explains how to inspect, adjust, and install your handlebar and stem.

Inspect your handlebar regularly

As with anything mechanical, every part of a bicycle has a limited useful life due to wear, stress, and fatigue. Fatigue refers to a low-stress force that, when repeated over a large number of cycles, can cause a material to fail or break. The length of the life of a part varies according to its design, materials, use, and maintenance. Although lighter parts may, in some cases, have a longer life than heavier ones, it should be expected that light weight, high performance parts require better care and more frequent inspections.



Figure 2 Function test the handlebar and stem

Regularly inspect your handlebar for signs of fatigue stress: dents, cracks, scratches, deformation, or discoloration. Large forces can accelerate the fatigue of a material. As an example, a crash may add a great deal of extra stress to your bike. As with this example, jumping your bicycle, performing bicycle stunts, severe off-road riding, downhill riding, or any abnormal bike riding also increase the stress on every part of your bike. If you choose to jump your bicycle, use it for stunts, or use it in a severe off-road or downhill environment, or ride it after a crash, carefully inspect your handlebar for signs of fatigue before and after each ride.

If you are unsure of the safety of your Race XXX Lite handlebar, do not ride the bicycle; take the bicycle to your dealer for adjustments. Even if you perform regular inspections, be aware that if you exceed the limit of strength of a given part, it will fail.

Once a month make sure the stem is in alignment with the front wheel. Test the stem connection to the fork by attempting to turn the handlebar from side to side with the front wheel locked between your knees (Figure

Test the security of the handlebar by attempting to rotate them in the stem.
 Make sure that no cables are stretched or pinched by rotating the handlebar.
 Check that all bolts are tight. The correct tightness varies according to the

Check that all bolts are tight. The correct tightness varies according to the type of stem on your bike. Check your bicycle owner's manual for these specifications. If you are unsure how to tighten these bolts, consult your dealer.

WARNING

An improperly adjusted or tightened handlebar, stem, or barends can cause you to lose control and fall. Make sure the stem, handlebar, and bar-ends are positioned and tightened properly before riding the bike.



Figure 3 Bar-end bolt perpendicular to hole radius

Only use correctly installed bar-ends

Improper clamp design can crush or damage the handlebar. Do not attach bar-ends that use an internal, expanding clamp mechanism. Bar-ends that attach to the outside of the handlebar must use a clamp mechanism that is designed with the clamp slot radial to the clamp center, with the bolt perpendicular to the slot and as close to the handlebar as possible (Figure 3).

Do not over-tighten the bar-end clamp. The clamp only needs to be tight enough to prevent rotation on the handlebar. Over-tightening can crush or damage the handlebar.

Adjust your handlebar for comfort

Handlebar position- the angle, width, and height of the handlebar- is largely a matter of personal preference blending comfort, efficiency, and balance. Your hands should be comfortable, and able to easily operate all controls. If your hands, arms, or shoulders are uncomfortable or numb you may need to adjust the handlebar or select components more suitable to your personal needs; consult your dealer.

Do not cut a Race XXX Lite handlebar to a narrower width. Cutting the bar could remove critical carbon layers and weaken the handlebar.

To adjust the angle of the handlebar

- 1. Loosen the handlebar clamp bolt(s) on the stem just enough that the handlebar can be rotated in the stem.
- 2. Position the handlebar to the desired angle, making sure they are centered in the stem.
 - 3. Tighten as in *Inspect your handlebar regularly*.

To change the handlebar height with a quill stem

Adjusting the handlebar height on a direct-connect stem affects the headset bearing adjustment. This procedure requires special tools and training so this should only be done by your dealer.

- 1. Loosen the stem expander bolt two to three turns.
- 2. Tap the top of the stem expander bolt, with a wood or plastic-faced mallet, to loosen the stem wedge.



Figure 4 Minimum insertion mark on stem quill

- 3. Adjust the handlebar to the desired height, but with the minimum insertion line inside the frame (Figure 4). A minimum of $2^{3/4}$ inches (70mm) of the stem quill must always remain in the frame.
 - 4. Tighten as in *Inspect your handlebar regularly*.

A WARNING

Never ride your bicycle with a quill stem raised above the minimum insertion mark. A quill stem that is positioned too high can damage the bike and can cause you to lose control and fall. Make sure the minimum insertion mark (Figure 4) is inside the frame.

Bontrager Warranty

Bontrager warrants each new Bontrager handlebar against defects in workmanship and materials for a period of one year from the date of sale. This warranty is expressly limited to the repair or replacement of a defective handlebar and is the sole remedy of the warranty. This warranty applies only to the original owner and is not transferable.

Claims under this warranty must be made through an authorized Bontrager dealer. Proof of purchase is required.

The warranty does not cover normal wear and tear, improper assembly or follow-up maintenance, or installation of parts or accessories not originally intended or compatible with the handlebar as sold.

The warranty does not apply to damage or failure due to accident, misuse, abuse, or neglect. Modification of the handlebar shall void this warranty.

Bontrager shall not be responsible for incidental or consequential damages. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. Labor charges for parts change-overs are not covered by the warranty.

This warranty gives the consumer specific legal rights, and those rights may vary from place to place. This warranty does not affect the statutory rights of the consumer.

Handlebar installation instructions

These instructions are written for an experienced mechanic. If you are not sure of your ability to correctly install this handlebar, or do not have the proper tools for handlebar installation, have the handlebar installed by your Bontrager dealer.

To remove the old grips

- 1. Lift the edge of a grip with a thin slotted screwdriver or similar tool.
- 2. Spray some hair spray, or water, under the grip.
- 3. Remove the screwdriver.
- 4. Rotate the grip back and forth, while pulling toward the end of the handlebar, until the grip slides off the handlebar.

Some grips use a spacer or shim between the grip and shifter. If your bike has these, do not lose these pieces.

To remove the brake and shift levers

Before removing the controls, note the order of the controls on the handlebar, and also the path of the cables.

- 1. Use an allen wrench (usually 5mm, or smaller) to loosen the clamp screws on the control levers.
- 2. Slide the levers off the handlebar.

To remove the old handlebar

- 1. Loosen and remove the handlebar clamp screws.
- 2. Remove the handlebar from the clamp.

To install the new handlebar

- Apply a small amount of grease to the threads and bearing surfaces of the handlebar clamp screws.
- 2. Center the Race XXX Lite handlebar in the stem.

The sweep of the bars should face back, toward the rider.

- 3. Install the handlebar clamp screws.
- 4. Gradually tighten the handlebar clamp screws until snug.

 Make sure the gaps at the top and bottom of the stem face plate are even.

To install the control levers and grips

Follow the previous order of grip placement, as well as the previous cable routing. Make sure no part has burrs or deformations which could scratch or damage the handlebar.

- 1. Slide the right levers onto the right side of the handlebar.
 - If the cables are too short, it may help to rotate the handlebar to the left. Sometimes it is necessary to remove the bars from the stem to gain enough cable slack.
- 2. Slide the left levers onto the left side of the handlebar.

Turn the bars fully to the right, if needed.

- 3. Lubricate the grips with hair spray, or water.
- 4. Slide the grips onto the handlebar.

If there should be a spacer or shim between the grip and shifter, install it with the grip.

5. If desired, install the bar-ends.

See Only use correctly installed bar-ends.

- 6. Stand the bike up on the floor, and straddle the top tube.
- 7. Set the angle of the handlebar, and tighten the stem clamp bolts.
- 8. Set the spacing and angle of the controls, and tighten the clamp bolts.
- 9. Inspect the assembly as in *Inspect your handlebar regularly*.